

**Manhattan**<sup>®</sup>  
TECHNOLOGY WITH VISION



PLAZA MODELS  
ST 250 / ST 350

Digital Satellite Receiver

Instruction Manual  
(English)

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Welcome to the world of Manhattan digital satellite receiver that will make your life closer to your dream. Before using your new receiver, we suggest that you carefully read this manual and the following safety notice.

The PLAZA model is an advanced digital satellite receiver with the unique option of Blind Search Facility and is designed to cope with the many different operating requirements of broadcast standards worldwide. During development, we have evolved with the best possible solutions to create the next generation of satellite receivers together with the most up-to-date electronics and easy to use on-screen menu system. The new digital satellite receiver is designed to give you outstanding pictures and CD-quality audio with a touch of a button.

## FEATURES

### All Models

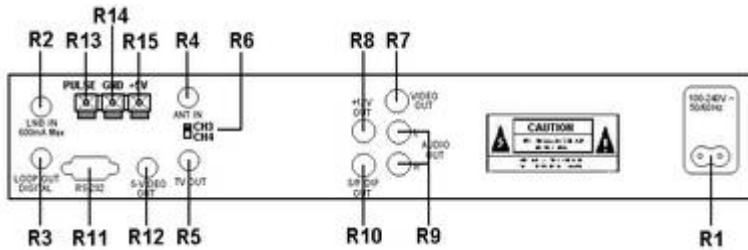
- 1 LNB input, IF signal loop through, supports Universal, Single, C Band and Wide Band LNB
- Multiple LNB switching 0/12V, 14/18 volts, 22KHz and DiSEqC 1.2
- S-Video output on mini DIN.
- RS – 232 port for PC connections and software upgrade
- 5 RCA sockets (Audio L & R, Video, 0/12V, Digital Audio (S/P DIF)
- Switched CH 3 & 4 NTSC Modulator
- 100 – 240 Volts AC, 50/60 Hz, 0.2Amps / 0.15Amps SMPS PSU
- 4 Digit LED front panel display
- Supports TV Standards PAL M & NTSC M with screen formats 4:3 and 16:9
- Up to 5000 channels TV or RADIO programmable
- DiSEqC 1.3 with USALS function
- On screen language support for up to 15 languages
- Fully automatic Scan & Store of TV & Radio channels of
- Channel search option by All, FTA, Network, TP with option of including Data channels.
- Advanced (Blind Search) search option by All, FTA, All + Data
- Built in Teletext Supporting Teletext and DVB Subtitle function
- SATCODX compatibility.
- EPG access for current, next and 7 days for on screen channel information
- Parental control facility by channel and menu locks
- 22 different favorite groups (11 TV & 11 Radio)
- Last channel recall facility and Last viewed channel remembered after power down
- Time display on Info banner and on front panel.
- Edit functions with picture in menu (Add, Delete, Name, Move and Sort) Channel, TP and Satellite
- Receiver to receiver full user settings and channel data copying facility
- 1 year, 10 event VCR/PVR timer facility
- Multiple audio selection (L, R, Stereo & Mono)
- Programmable sleep timer up to 2 hours
- Supports multiple Audio language broadcasts
- Includes 4 on screen games (Tetris, Minesweeper, Black Jack, and Video Poker)
- DVB Common Interface with dual CAM slots
- Embedded IRDETO CI card slot
- PVR ready (for fitting 40GB to 120 GB Hard Disk Drive)

## SAFFTY NOTICE

DANGER: HIGH VOLTAGE! RISK OF ELECTRIC SHOCK!

- DO NOT open top cover. High voltages inside. Please refer all servicing to qualified service agents
- DO NOT obstruct the ventilation slots on the top cover. Install the receiver in a well-ventilated location
- DO NOT insert or drop small objects into the receiver
- DO NOT expose the receiver to water, moisture, extreme cold or direct sunlight.
- DO NOT use solvents of any kind to clean the unit, only use a soft-dry cloth.
- DO unplug the receiver from the mains outlet before connecting or disconnecting anything.
- DO unplug the receiver from the mains, TV, and the satellite LNB feed when a thunderstorm is expected.
- DO unplug the receiver from mains out let before cleaning the unit.

## REAR PANEL CONNECTIONS

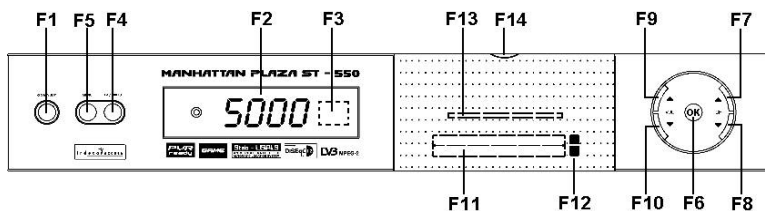


## CONNECTORS AND DEFINITIONS

Please do not connect the power to the receiver until all other connections have been made and checked.

- R1: AC IN (Power Cord) Connect this lead to the mains outlet (100-240 Volts AC, 50/60 Hz, 0.2Amps / 0.15Amps)
- R2: LNB IN (IF Input) Connect the IF cable from your LNB to this connector.
- R3: LOOP OUT If you have a second satellite receiver, connect the receivers LNB input to this connector.
- R4: ANT IN Connect your TV antenna to this connector.
- R5: TV OUT (Modulator Output) Connect your TV or VCR to this connector.
- R6: Modulator channel output switch. Select channel of your preference.
- R7: VIDEO Composite video output for connecting to an AV monitor etc.
- R8: 0/12V Switched + 12V DC output for use with LNB switches.
- R9: AUDIO LEFT / RIGHT Audio outputs for connecting to a Hi-Fi system.
- R10: SP / DIF Digital audio output for connecting to a HiFi system
- R11: RS-232 Connect your PC to this connector using a NULL MODEM (female to female) cable for software upgrade. Connect STB for channel data transfer from another receiver of same model.
- R12: S- VIDEO Additional video output for connecting to a VCR or CAMCORDER with S-VIDEO capability
- R13: PULSE Connection for Mechanical Polarizer (Pulse output)
- R14: GND Connection for Mechanical Polarizer (Ground)
- R15: +5V 300mA MAX Connection for Mechanical Polarizer (+5V output)

## FRONT PANEL CONTROLS

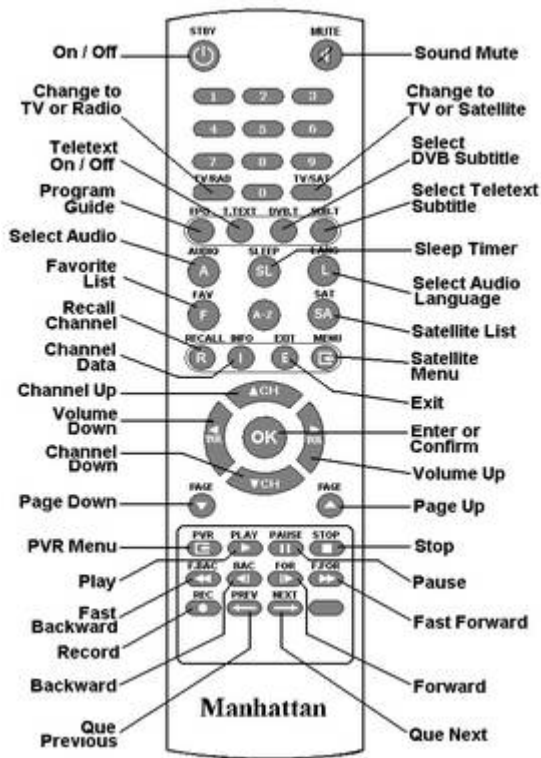


## CONTROLS AND DEFINITIONS

- F1: STANDBY / ON After connecting the power, press this button to switch ON the receiver or to switch to STANDBY
- F2: DIGIT LED DISPLAY This will display the channel number or certain programming functions when using the menus. In standby mode it will display the time.
- F3: REMOTE CONTROL SENSOR Location of the infrared receiver. Do not obstruct this when using the remote control.
- F4: TV / RADIO Press this button to change from TV channels to RADIO channels and vice versa.
- F5: MENU Press this button to enter the programming menus. To exit the menus, press it again.
- F6: OK In viewing mode press this button to display channel list. In menu mode this button is used to enter the programming parameters.
- F7: CH UP In viewing mode it will step up channels sequentially. In programming mode it will move the cursor upwards in the menu.
- F8: CH DOWN In viewing mode it will step down channels sequentially. In programming mode it will move the cursor downwards in the menu.
- F9: VOL UP In viewing mode it will increase the sound. In programming mode it will move the cursor to the right or change a function.
- F10: VOL DOWN In viewing mode it will decrease the sound. In programming mode it will move the cursor to the left or change a function.
- F11: COMMON INTERFACE (CI) SLOTS A AND B Your receiver is equipped with two slots (behind the front flap) accepting Type 1 and Type 2 PCMCIA modules. Open flap from top catch (F14) and Insert CI module together with smart card into either of these slots.
- F12: CI SLOTS A AND B EJECT When you want to remove a cam press the eject button.
- F13: IRDETO CARD SLOT (For Models with embedded Irdeto) Insert your smart card into this slot.

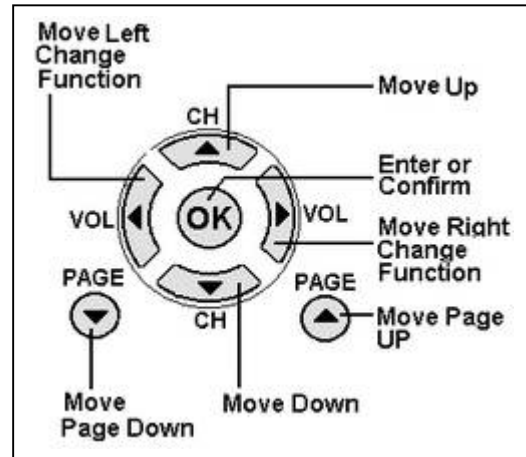
## REMOTE CONTROL FUNCTIONS

We recommend that you familiarize yourself with the remote control handset prior to installing the receiver.



**OPERATION IN PROGRAMMING MODE**

The menus are designed to assist you from the moment you switch on the receiver. Follow the help messages at the bottom of the menu.



**INSTALLATION**

For digital quality picture, connect the receiver to your TV using a fully wired SCART lead. If using the UHF TV OUT connector then follow below step.

**TUNING YOUR TV TO OUTPUT SIGNAL**

Connect your TV using a co-axial lead and switch on the receiver. After initialising the digit LED (F2) will display "NOCH". Select a spare channel on your TV and tune it until you see the following OSD Settings menu. Finally store the settings on your TV.

**MAIN MENU**

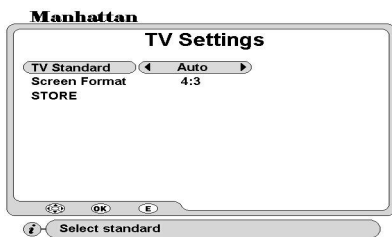
When you press the MENU key the main menu will appear on your screen wherein you can configure all your settings.



To select, press CH up / down or VOL up / down key. To enter a menu, press OK key.



Language: Select the required OSD language.  
 Transparency: Adjust transparency of channel banner and channel list.  
 Info-Display: Select display time of the channel banner. If you select On it will remain on until exit key is pressed.  
 Audio Lang / Subtitle Lang: Select default language. This sets all channels to that language  
 Screen Saver: Select time to turn ON screen saver in radio mode. After the seconds have lapsed, the screen will change to revolving radio banner.  
 STORE: After above settings move to store and press OK key.



### TV Settings

TV Standard: Select the output for your TV. Example: for USA select NTSC M. If your TV supports 'Auto Sensing' then select Auto.  
 Screen Format: Select the picture format for your TV.  
 STORE: After above settings move to store and press OK key.



### Time Settings

In standby mode, the front display and channel banner will indicate the time after setting as below.  
 Year / Month / Date / Hour / Minutes: Press VOL up / down to select.  
 STORE: After above settings move to store and press OK key.



### Event Timer

You can program up to 10 events for the receiver to switch on automatically for recording onto VCR or PVR  
 Event No: Select event number you are setting.  
 Timer: To turn on an event, select VCR or PVR.  
 TV / Radio: Select TV or Radio mode.  
 Satellite: Select name of the satellite.  
 Channel: Press OK and select the channel you want to record.  
 Month / Date: Select month and date the event is to come on.

On Time / Off Time: Using 0-9 keys enter the time.  
 STORE: After above settings move to store and press OK key



To reset the receiver to factory default settings, select Master Reset and press OK. A PASSWORD window will appear. Using 0-9 keys enter your password and the WARNING message will appear. Press OK to reset or EXIT to abandon resetting.

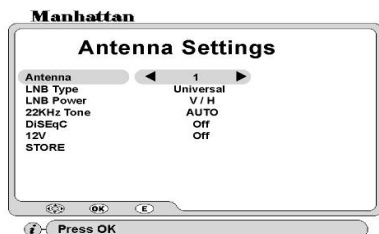
### SYSTEM INFORMATION

This displays the software versions. If you have a technical inquiry regarding the functions of your receiver, it may be necessary to quote these figures when calling the technical help line.

### INSTALL Menu

#### CONFIGURING YOUR ANTENNA

Your receiver is preset to Single LNB for all antenna numbers (1-50). If you are using one Single LNB, then you do not need to change any settings. You can re-program these when using more than one LNB.



Antenna: Select antenna reference number.

LNB Type: Select type and press OK to configure LO settings.

#### LO SETTINGS:

- Universal --- Low 9750, High 10600, 22 KHz tone is automatic.
  - Single -----10750, 22 KHz tone is selectable.
  - C Band ----- 5150, 22 KHz tone is selectable.
  - Wide ----- Low 9750, High 10750, 22KHz tone is selectable
- You can change the LO figure for any of these settings to suit your LNB

#### LNB POWER

- V / H -----Both polarities are selected. V = Vertical 14V. H = Horizontal 18 V
- 14V Skew On ----- 14V with output for Mechanical Polarizer switched on.
- 18V Skew On ----- 18V with output for Mechanical Polarizer switched on.
- Off ----- No power output.

22KHz Tone: When using other than Universal LNB, you can select tone status.

DiSEqC: When using more than one antenna for fixed installation with a DiSEqC switch. See below.

### EXAMPLE: To configure four antennas

Astra 2 (28.2E), select Antenna 1 and set DiSEqC to **1**  
Astra 1 (19.2E) select Antenna 2 and set DiSEqC to **2**  
Hotbird 1-6 (13E), select Antenna 3 and set DiSEqC to **3**  
Thor 2, 3 (1W), select Antenna 4 and set DiSEqC to **4**

### EXAMPLE: To configure MONOBLOCK LNB

Astra 1(19.2E), select Antenna 1 and set DiSEqC to **Mini-A**  
Hotbird 1-6(13E), select Antenna 2 and set **DiSEqC** to **Mini-B**

**12V:** To select 12 volts output for relay type LNB switch.

**STORE:** After above settings move to store and press **OK** key

## CONFIGURING DiSEqC ANTENNA POSITIONER

### DiSEqC 1.2 menu (Manual positioner)

With DiSEqC 1.2 antenna positioner, you can search and download individual satellites with manual positioning.



In Channel Search menu go to Positioner and select **DiSEqC 1.2** and press OK key. A sub menu will appear.

**Move:** Move antenna furthest possible East or West and enter the limits below.

**East Limit:** After furthest East enter the limit here

**West Limit:** After furthest West enter the limit here

**Erase Limits:** To clear limits press OK

**0 Position:** To move to 0 (centre) position on motor.

**Re-sync:** If you need to re-sync satellite positions, first find one satellite then move down to 'Re-sync' and press OK.

**STORE:** After above settings move to store and press **OK** key

### DiSEqC USALS menu (Automatic Positioner)

You can search and download up to 40 satellites at a time automatically using the DiSEqC USALS menu.



In channel search menu go to Positioner and select **DiSEqC USALS** and press OK key. A sub menu will appear.

**Longitude:** Enter your location using 0-9 keys and then PAGE up / down keys to enter E (East) or W (West).

**Latitude:** Enter your location using 0-9 keys and then PAGE up / down keys to enter N (North) or S (South). **EXAMPLE:** London – Longitude = 0 and Latitude = 51.5N

**USALS:** Press OK to move antenna automatically to required satellite.

**0 Position:** To move to 0 (centre) position on motor

**STORE:** After above settings move to store and press **OK** key

## CHANNEL SEARCH -- Automatic Scan and Search



Using DiSEqC **USALS** menu you can search and download up to 40 satellites automatically at a time. Follow settings below.

**Search Index:** Set index numbers for each satellite you wish to search.

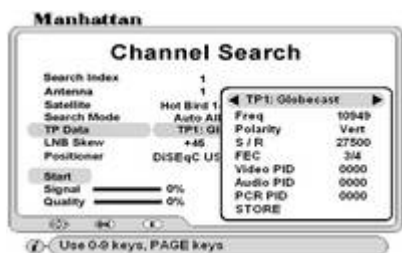
**Antenna:** If you are using more than one LNB, select antenna reference as configured previously. If you are using one LNB then this may remain as 1.

**Satellite:** Press OK and select satellite name. Remember that you have to select a different name for each index number.

**Search Mode:** Select search option for each satellite. See below for options. Options with **+ D** will also include data channels

- **Auto All** - All TP, Video and Radio channels automatically.
- **Auto All + D** -All TP, Video, Radio and Data channels automatically.
- **Auto FTA** - All TP for Free To Air Video and Radio channels automatically
- **NIT All** – All TP, Video and Radio channels with Network Identification Table automatically
- **NIT All + D** – All TP, Video, Radio and Data channels with Network Identification Table automatically.
- **NIT FTA** -- All TP for Free to Air Video and Radio channels with Network Identification Table automatically.
- **TP All** -- Selected TP for all Video and Radio channels. To select move to TP Data and press OK for sub menu.

- **TP All + D** -- Selected TP for all Video, Radio and Data channels.
- **TP FTA** -- Selected TP for Free to Air Video and Radio channels.
- **Manual All** – Single TP for all Video and Radio channels. To select go to TP Data and press OK for sub menu.
- **Manual All + D** – Single or user defined TP for all Video, Radio and Data channels.
- **Manual FTA** – Single or user defined TP for Free To Air Video and Radio channels.



To select press VOL up / down. To edit or add, follow below settings.

To add select User Defined.

**Freq:** Enter using 0-9 keys.

**Polarity:** Select polarity

**S / R:** Enter using 0-9 keys

**FEC:** Select FEC

**Video PID / Audio PID / PCR PID** Enter the channel PID using 0-9 keys

**STORE: After above settings move to store and press OK key.**

If you have added a TP, this will appear at the end of the list. Repeat above steps for all the satellites you wish to search

**LNB Skew:** If you have set **LNB Power** to 14 Or 18 volts with **Skew on** then you can adjust the LNB Skew in this menu. Press VOL up / down key to adjust. To adjust step by step, press and release the key. The skew that you have set will be stored automatically after START has been activated.

### NOTE: SIGNAL AND QUALITY (Channel Search Menu)

In channel search, the signal and quality conditions shown are as below.

- Blue: Indicates noise only with no actual signal
- Green: Indicates actual signal
- Quality: Green shows the quality of the signal

### Positioner: Move down to Positioner and select DiSEqC USALS

Now go to START and press OK key. The antenna will move to the first satellite in the index and **Searching** will start. After completing channel search, it will automatically scan and search the next satellite in the index. This process is repeated until all satellites in the index are searched.



When searching, this page will show the TV and Radio channels being downloaded.

After completing the index, the positioner will move the antenna to the first satellite.

### CHANNEL SEARCH: Manual Scan and Search

Configure Channel Search as described earlier then go to **Positioner** and select **DiSEqC 1.2** If you only have a fixed antenna, then select **None**. Move the antenna until you find the correct position, maximum signal and quality and **store the position**

**START:** Press OK to start search.

### USING A MECHANICAL POLARIZER FOR YOUR LNB

For fixed antenna installation, follow below steps. Connect the appropriate leads as shown on the output terminals (**R13, R14 and R15**) at the back of the receiver. In **INSTALL** menu, go to **Antenna Settings** to configure below settings.

#### ANTENNA 1

- **Antenna:** Select reference 1
- **LNB Type:** Select Wide and press OK to configure LO settings if different.
- **LNB Power:** Select 14V Skew On. This will switch your LNB to lower band.

#### ANTENNA 2

- **Antenna:** Select reference 2
- **LNB Type:** Select Wide and press OK to configure LO settings if different
- **LNB Power:** Select 18V Skew On. This will switch your LNB to higher band.
- **22KHz Tone:** Select tone option if required.
- **STORE: Store the settings.**



## CHANNEL SEARCH

Go to Channel Search and configure following

- Search Index: Select index 1
- Antenna: Select reference 1
- Satellite: Select satellite name.
- Search Mode: Select search option.
- TP Data: Select a lower band TP.
- LNB Skew: Adjust skew for maximum Signal and Quality. After this go to Index search and set as below.
- Search Index: Select index 2
- Antenna: Select reference 2
- Satellite: Select the same satellite as above.
- Search Mode: Select search option.
- TP Data: Select a higher band TP.
- LNB Skew: Adjust skew for maximum signal and quality
- START: Start search. This will search antenna 1 first then antenna 2.

## ADVANCE SEARCH: Special Feature

This feature is used when you want to search a satellite for any new channels or those not included in the Database or you do not have the full data of the channel. In INSTALL menu, go to Advance Search

NOTE: Searching with this feature is slower than normal search.



Antenna: Select antenna number.

Satellite: Select satellite name.

Search Mode: Select search option. Option + D includes data channels

- ALL - All Video and Radio channels.
- FTA - Free To Air Video and Radio channels
- ALL + D -All Video, Radio and Data channels.

Scan Freq: Select option. If you select All it will scan the complete frequency related to the LNB type you have selected. To define the frequency, select User Defined. This will allow you to enter the frequency on below menu lines.

Symbol Rate: Select option. If you select ALL it will scan with all the Symbol Rates applicable. To define the symbol rate, select User Defined and press OK. A sub menu will appear. Select and press OK on the symbol rates you wish to apply and finally EXIT.

Start Freq: Using 0-9 keys, enter the start frequency here. The search will start from this frequency

End Freq: Using 0-9 keys, enter the end frequency here. The search will stop after this frequency

Polarity: select polarity.

Positioner: Select positioner if required. Configure this as described earlier.

Start: Press OK. Transponder search will start. Below Searching page will appear.

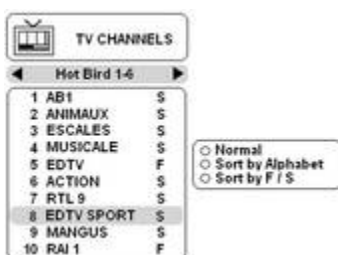


Shows serial number of TP, Frequency, Symbol Rate (S/R), Polarity and FEC found.

After the search for transponders has finished, it will start channel search automatically and display the TV and Radio channels found.

## TO CHANGE CHANNEL OR SATELLITE

There are two ways of changing channel or satellite as below.



TO SELECT A CHANNEL WITHIN THE SAME SATELLITE

Press OK key and channel list will appear on your screen.

- Use CH and PAGE up / down keys to scroll through the list.
- Press OK on required channel

TO SELECT A CHANNEL FROM ANOTHER SATELLITE

- Use VOL up / down to change the list.
- Use CH and PAGE up / down to scroll through the list
- Press OK on required channel. If you are using antenna positioner, it will automatically move to the required satellite. If you are using DiSEqC switch, then it will switch to that antenna.

## SORTING THE CHANNEL LIST

Press Green key to sort channels alphabetically.

Press Yellow key to sort channels Free To Air first followed by Scrambled.

Press Red key to return to normal list.

## TO SELECT A CHANNEL FROM ANOTHER SATELLITE

Press SAT key and the combined channel and satellite list will appear.

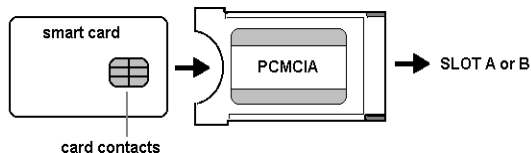


- Use CH and PAGE up / down to scroll through the satellite list
- Press OK on required satellite, the channel list will change and the cursor will also move to its channel list.
- Use CH and PAGE up / down to scroll through the channel list
- Press OK on required channel. If, you are using antenna positioner, it will automatically move to the required satellite. If you are using DiSEqC switch, then it will switch to that antenna.

## SELECTING RADIO CHANNELS

Press TV / RADIO key once and it will change to Radio mode. Press it again to change back to TV mode. Follow above steps for changing the channel.

## CONDITIONAL ACCESS



## VIEWING SCRAMBLED CHANNELS

Open the flap (F14) from top and you will find two CI slots behind it. Insert CAM in either of the slots together with a valid card as shown below. To display CAM and card parameters go to CA Setup.



### Common Interface

After inserting card and CAM slots A or B will initialize, showing the CAM type. Select the slot you are using and press OK for sub menu. Follow the menu instructions for checking or changing any parameters.

Irdeto: Shows Irdeto card and Loader Information. Follow the menu instructions for checking any parameters

Loader Status: This menu displays system software. It may be necessary to quote these figures when calling the technical help line.

IRDETO CARD SLOT -- For models with embedded Irdeto systems.

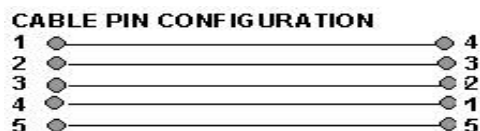
Insert your card into slot F13 with the card contacts facing down.

## UPGRADING SOFTWARE

You can upgrade the software of your receiver when this is available. Your current software version is displayed in the Loader Status menu.

## UPGRADING SOFTWARE VIA PC

The software is available on our website <http://www.plaza-st.com> Follow instructions contained within the zipped file. To connect via your PC the following type cable is required.



## TELETEXT FUNCTION

The receiver has a built in Teletext function to call up text pages when transmitted.

- To enter Teletext mode press T. TEXT (Green) key on your remote.
- To call up a page enter using 0-9 keys
- To change page sequentially, use PAGE up / down keys
- To exit from Teletext mode, press T. TEXT key again or press EXIT.

## TO SELECT SUBTITLES ON A CHANNEL

Press SUB.T (Blue) key. Select required language and press OK. The subtitles will appear after a few seconds. If not transmitted, it will state No Subtitles available.

## TO SELECT AUDIO LANGUAGE

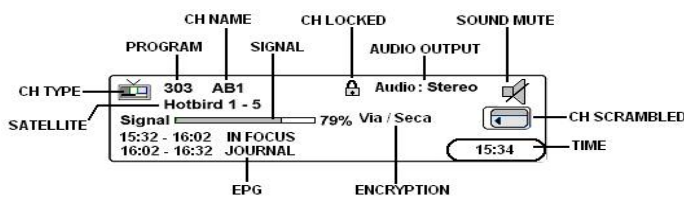
You can select an audio by pressing LANG key. The screen will display options on the top left. Select required language and press OK. To change the output, press the AUDIO key repeatedly.

## TO ACTIVATE SLEEP TIMER

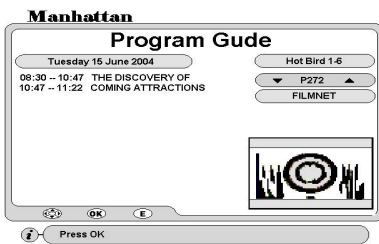
Press SLEEP key repeatedly to switch on and select duration of the timer. The time (minutes) will be displayed on the top left. You can program the timer for maximum 2 hours. After the time has lapsed, the receiver will switch to standby.

## CHANNEL BANNER

Press INFO key once to display the channel banner. Press INFO key again and channel data will appear above the channel banner.



## ELECTRONIC PROGRAM GUIDE (EPG)



To display correct EPG it is important to set the time first.

To display EPG, what's on now and next, press EPG (red) key.

PROG No. Select program number or press OK

HIGHLIGHTED EVENT: Press OK for details and PAGE up / down for next page.

NOTE: If there is no EPG transmitted, it will state 'No Data'. After changing channel please allow few seconds before you press EPG key.

## INSTALLING FAVORITE CHANNELS

There are 11 TV and 11 Radio channel lists you can create. You can rename the headings to your requirement. Go to INSTALL menu and select Favorite Channels. Follow below steps.



TO CHANGE A HEADING: Press FAV key

TO CHANGE CHANNEL LIST: Press SAT key

TO ADD CHANNELS: Press OK on Add, the cursor will move to channel list. Select channel and press OK. This channel name will appear on the right under the favorite heading. Finally press EXIT.

TO RENAME A HEADING: Select Rename and press OK. A keypad will appear. Select character and press OK. After naming press EXIT key.

## DELETING A FAVORITE CHANNEL

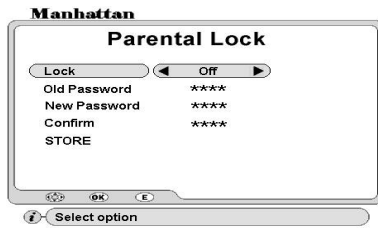
Select Delete and press OK, the cursor will move to channel list on the right. Select channel and press OK. Finally press EXIT.

STORE: After above settings and exiting, move down to STORE and press OK

## VIEWING FAVORITE CHANNELS

To select favorite channel, press FAV key. Press VOL up / down key to change list and press OK on required channel.

## TO LOCK MENU AND CHANNELS



Go to INSTALL menu and select Parental Lock.

Lock: Press VOL up / down to turn it on.

Old Password: Use 0-9 keys and enter 0000. This is the default password.

New Password: Use 0-9 keys and enter four digits of your choice.

Confirm: Use 0-9 keys and re- enter four digits of your choice.

STORE: Press OK to store the settings.

NOTE: After locking you can only access a locked channel or the menus by entering your password.

## ADVANCED INSTALLATION CHANNEL EDIT

This section describes the use of the EDIT menu. It includes Channel, Satellite and TP edit functions.



In EDIT menu select 'Channel Edit'. Press VOL up / down to select Lock, Delete, Rename or Move function.

### TO LOCK CHANNELS

Select Lock and press OK. The cursor will move to TV channel list. Press VOL up / down if you want to select Radio Channel list. Select channel and press OK. A padlock icon will appear against the channel. Finally press EXIT.

### TO DELETE CHANNELS

Select Delete and press OK. The cursor will move to TV channel list. To delete individual channel, press OK twice on the channel. This will highlight it in red. To delete a group of channels, press OK once on the first channel. Then scroll down wards this will highlight these in mauve. Finally press OK on the last channel in the group and this will highlight these in red. When finished, press EXIT.

### TO RENAME CHANNEL

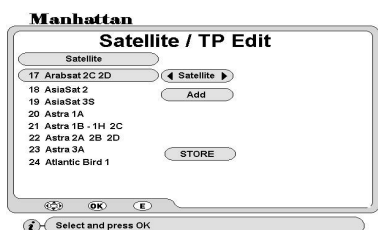
Select Rename and press OK. Select channel and press OK, a keypad will appear. Select character and press OK. After naming press EXIT.

### TO MOVE CHANNEL

Select Move and press OK. To move individual channel, press OK twice on the channel. This will highlight it in mauve. Then select a position in the list and press OK. To move a group of channels, press OK once on the first channel. Then scroll down wards this will highlight these in mauve. Press OK on the last channel in the group. Select a position in the list and press OK. When finished, press EXIT.

STORE: After all above settings and exiting, move down to STORE and press OK

## SATELLITE / TP EDIT



Go to EDIT menu and select Satellite / TP Edit. Select Satellite or TP option.

TO ADD A SATELLITE --- Select Satellite option.

Select Add and press OK, a keypad will appear. Select character and press OK.

After naming press EXIT. The new satellite will be entered at the bottom of the list. Now enter the Angle of the satellite using 0-9 keys. After this press EXIT.

TO DELETE A SATELLITE

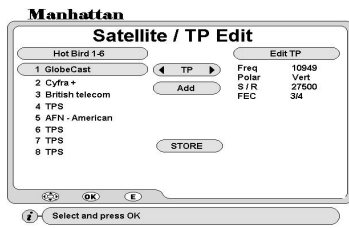
Select Delete and press OK, the cursor will move to satellite list. Select the satellite you want to delete and press OK. After this press EXIT.

### TO RENAME A SATELLITE

Select Rename and press OK. Select the satellite you want to rename and press OK. A keypad will appear. Select character and press OK. After naming press EXIT.

## TO SORT SATELLITE LIST

After adding a satellite select Sort and press OK. The list will be sorted by satellite positions in degrees.



TO EDIT A TP --- Select TP option and press OK

The cursor will move to TP list. Select the TP you want to edit and press OK. Cursor will move to Edit TP. Now enter the Frequency, Polarity, S / R and FEC of the TP. After this press EXIT.

TO ADD A TP

Select Add and press OK, a keypad will appear. Select character and press OK. After naming press EXIT. The new TP will be entered at the bottom of the list. Now enter the Frequency, Polarity, S / R and FEC of the TP. After this press EXIT.

## TO DELETE A TP

Select Delete and press OK, the cursor will move to TP list. Select the TP you want to delete and press OK. After this press EXIT.

## TO RENAMING A TP

Select Rename and press OK. Select the TP you want to rename and press OK. A keypad will appear. Select character and press OK. After naming press EXIT.

## TO SORT TP LIST

Select Sort and press OK. This will sort the TP list in the order of lowest frequency first.

STORE: After all above settings and exiting, move down to STORE and press OK

## RECEIVER TO RECEIVER COPY FUNCTION

You can copy the channel and user settings onto another receiver of the same model. Follow below steps.

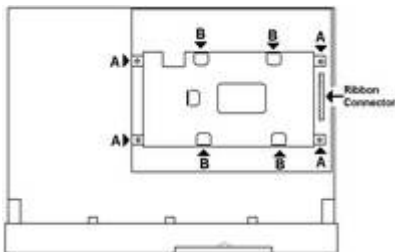
1. Connect download cable to 'RS232' connectors (R11) on both the receivers.
2. Connect power to the master receiver from which you want to copy the data and switch it on. Go to INSTALL menu and select Data Download. Enter your password and the menu will open. Select STB to STB Download.
3. Power on the slave receiver on which you want to copy the data. This receiver will then display the loader menu and the download progress.
4. When finished the slave receiver will reboot and come up with a channel.

## INSTALLING THE PVR (HARD DISK DRIVE) For models with PVR ready

We recommend Samsung, IBM and Fujitsu type Hard Disks. Other Hard Disks may cause interference with the receivers tuning function.

## FITTING THE HARD DISK DRIVE

**WARNING!** DO NOT FIT THE HARD DISK WHILST THE RECEIVER IS POWERED ON. DISCONNECT FROM MAINS POWER PRIOR TO FITTING. For fitting see diagram below



- Remove the top cover by undoing three screws. Two located on the left and right sides and one at the top centre at the back.
- Carefully remove the four screws marked A located on the hard disk bracket.
- Remove the bracket and fit the hard disk to the bracket with screws B supplied. Ensure that the connectors of the hard disk are nearer the ribbon connector.

- Re fit the hard disk bracket using screws A. Check that the connecting cables are not trapped.
- Connect the ribbon (Data) and the supply connectors to the hard disk.
- Finally re fit the top cover.

## FORMATTING THE HARD DISK FOR FIRST TIME USE

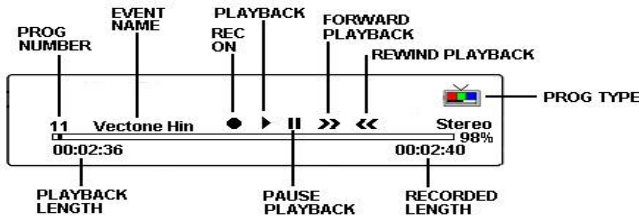
Connect power to the receiver and allow 30 seconds for the Hard Disk to initialize. Then press PVR key and following menu will appear.



**Format Hard Disk:** After fitting Hard Disk or to erase previously recorded events, press OK on this menu. A message Formatting will erase all data will come up. To format press OK.  
**Play / Edit:** When you want to playback or edit the events recorded, press OK on this menu and follow steps in PLAYBACK AND EDITTING section below.

**TO RECORD PROGRAMS**

To start recording, press REC key. The following record banner will appear. Please note that the picture will appear paused for a few seconds initially although there will be no pause in the actual recording. During recording you are actually watching the playback and therefore a pause is noticed before it begins. The recording will remain on until you press STOP key.



**TO WATCH A DIFFERENT CHANNEL WHILST RECORDING ANOTHER**

Whilst recording one channel you can watch a different channel, but within the same TP. Press OK key for channel list and select a channel within the same Transponder. To resume to the channel being recorded, press PLAY key.

**TO RECORD TIMED PROGRAMS**

Follow steps described in Event Timer. The recording will start automatically at the time when the events come on.

**TO PLAYBACK AND EDIT**

Press PVR key and select Play / Edit.

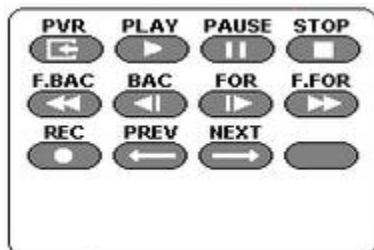


**Play:** Select Play and press OK once, the cursor will highlight a recorded event. Select the event and press OK.  
**Delete:** Select Delete and press OK once, the cursor will highlight a recorded event. Select the event and press OK. After deleting press EXIT.  
**Rename:** Select Rename and press OK once, the cursor will highlight a recorded event. Select the event and press OK a keypad will appear. Select character and press OK. After naming press EXIT.

**Lock:** Select Lock and press OK once, the cursor will highlight a recorded event. Select the event and press OK. The lock icon will appear on the right of the event. After locking press EXIT. The event can only be played back after entering your password.

**STORE:** After above settings and exiting, move down to STORE and press OK

**PVR REMOTE KEYS**



**PVR:** To enter PVR play, edit and formatting menus.  
**PLAY:** To commence playback  
**PAUSE:** To momentarily stop.  
**F.BAC:** To fast play backwards. Press repeatedly to increment the speed.  
**BAC:** To slow play backwards. Press repeatedly to increment the speed.  
**FOR:** To slow play forwards. Press repeatedly to increment the speed.  
**F.FOR:** To fast play forwards. Press repeatedly to increment the speed  
**REC:** To start recording.

**PREV:** To cue backwards using a marker. Press repeatedly to move the marker. Then press PLAY again.  
**NEXT:** To cue forwards using a marker. Press repeatedly to move the marker. Then press PLAY again.

## TROUBLE SHOOTING GUIDE

If you suspect there is a problem with your receiver, please check the following trouble shooting guide before calling a Manhattan authorised service agent.

WARNING! Do NOT attempt to repair the receiver yourself. Tampering with the receiver may result in fatal electric shock and will invalidate your warranty.

Symptoms --- Possible cause / solutions

Front display not lit --- Check that the mains lead is plugged into the power socket. Check that your TV is tuned for the correct channel or is switched to correct AV input.

No picture or sound or any menus --- No signal. Channel is scrambled. The antenna is not in correct position. Check LNB wire is not damaged or shorting. Check LNB may be faulty. Unplug receiver from power socket and retry.

Interference, on picture, using Modulator output --- Local terrestrial TV interference. Switch the output channel to different one then re-tune your TV. Select the appropriate 'TV Standard' using TV Settings menu.

Bad picture with blocking or frozen --- Signal weak or noisy. Check signal quality. Antenna not in correct position

Not responding to remote control --- Check the batteries in your remote control. Replace with new.

You have lost or forgotten your password --- Apply master password or contact your Manhattan dealer.

## SPECIFICATIONS

### TUNER

Input Connector	F-type IEC 169-24 Female
Frequency Range	950MHz to 2150MHz
Input Impedance	75 Ohm
Signal Level	-25 to - 65 dBm
LNB Power & Polarization	Vertical +14V, Horizontal +18V (600mA Max. with Overload Protection)
LNB Control	22KHz $\pm$ 4 KHz, Tone burst A/B and DiSEqC 1.2
22 KHz Tone Amplitude	0.6Vpp ( $\pm$ 0.2V)
Input Symbol Rate	1~45 Msps
FEC Decoder	Auto, 1/2, 2/3, 3/4, 5/6, 7/8

### SYSTEM

Transmission Standard	DVB MPEG-2
Input Data Rate	Max 15Mb/s
Aspect Ratio	4:3, 16:9
Video Resolution	720 x 480 NTSC, 720 x 576 PAL
Audio Decoding	MPEG Layer 1 and 2
Audio Mode	Single channel / Dual Channel/Joint Stereo / Mono
Sampling Rate	32KHz, 44.1KHz, 48KHz, 96KHz,

### COMMON INTERFACE

Slots	2 slots type 1 and type 2
PCMCIA	DVB Common Interface Standard

### IRDETO EMBEDDED CI

Card Slot	1 Slot DVB Common Interface Standard
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### PVR READY

To fit 40 - 120 GB Hard Disk Drive

### CONNECTORS

CVBS	1 PHONO RCA
Audio Output	2 x PHONO (L, R) / RCA
Digital Audio Output	1 PHONO RCA (S/P DIF)
+12V Output	1 PHONO RCA (+12Volts 100mA Max)
Data Interface	1 RS232 (Bit Rate: 115,200 baud Connector: 9-pin D-sub type)
RF connectors	75 Ohm IEC 169-2 Male/Female

### RF MODULATOR

Frequency	60MHz to 72 MHz
Channel Range	CH3 to CH4
TV standard	NTSC M

## POWER SUPPLY

Type	AP-129B SMPS
Input Voltage	100 -- 240 Volts AC, 50/60Hz, 0.2Amps / 0.15Amps
Power Consumption	Maximum 30W
Protection	Separate Internal Fuse
Ambient Temperature Range	0 – 45 Degrees C
Usage	This power supply is not for external use. This power supply must be installed in a suitable electrical, fire and mechanical enclosure. All secondary output circuits are SELV, and are not at hazardous energy levels under normal and single fault conditions. This power supply is for use in pollution degree 2 environments. This power supply is defined as a Class II power supply.

## PHYSICAL DIMENSIONS

Size (W X H X D)	380 X 68 X 296 mm
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## MASTER PASSWORD

This is the master password for your receiver. Cut this section out and keep it in a safe place. It will be useful later if you forget or lose your password: 6699